

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A method of promoting the healing of a skin wound comprising applying to said skin wound an effective skin wound healing amount of a composition comprising:
a bone protein mixture depleted of histones and/or ribosomes,
the growth factors BMP-3 and TGF- β 2, and
a pharmaceutically acceptable carrier comprising a bone derived mixture of proteins
~~comprising the growth factors BMP-3 and TGF- β 2 in a pharmaceutically acceptable carrier, said mixture having been treated to deplete histones and/or ribosomes.~~
2. (Previously presented) The method of claim 1 wherein the composition further comprises at least one bone-derived growth factor selected from the group consisting of BMP-2, BMP-4, BMP-5, BMP-6, and BMP-7, wherein at least one said growth factor retains native post-translation modifications.
3. (Previously presented) The method of claim 1 wherein the composition further comprises at least one bone-derived growth factor selected from the group consisting of FGF-1, TGF- β 1, and TGF- β 3 in its native post-translation modified form.
4. (Previously presented) The method of claim 1 wherein at least one said growth factor is at least partially phosphorylated and glycosylated.
5. (Previously presented) The method of claim 1, wherein said composition is free of histone proteins H1c and H1x.
6. (Previously presented) A method of promoting skin wound healing comprising applying to said skin wound a composition comprising a mixture of growth factors comprising BMP-2, BMP-3, BMP-6, and TGF- β 2 in a pharmaceutically acceptable carrier.

7. (Previously presented) The method of claim 1 wherein said composition is substantially free of ribosomal proteins LORP, Lg, s20, L3, S3a, S4 and L32.

8. (Previously presented) The method of claim 1 wherein said at least one growth factor is derived from bovine bone and is at least partially phosphorylated and glycosylated.

9. (Currently amended) A composition for the treatment of skin wounds comprising:

a histone-depleted bone protein mixture;

at least one growth factor retaining native post-translation modifications;

BMP-3 and TGF- β 2; and

a pharmaceutically acceptable carrier, wherein said composition is active for promoting skin wound healing without inducing osteogenesis when implanted at a site in need of skin wound healing
~~A composition for the treatment of skin wounds, said composition comprising a histone-depleted mixture of the bone morphogenetic proteins BMP-3 and TGF- β 2, said mixture of proteins having been treated to deplete histone proteins and comprising at least one growth factor retaining native post translation modifications, said composition including a pharmaceutically acceptable carrier.~~

10. (Currently amended) The composition of claim 9, wherein said histone-depleted ~~mixture of proteins~~ bone protein mixture has been further treated to remove ribosomal proteins.

11. (Currently amended) A composition for the treatment of skin wounds comprising:

a ribosome-depleted bone protein mixture,

at least one bone morphogenetic protein retaining native port-translation modifications;

BMP-3 and TGF- β 2; and

a pharmaceutically acceptable carrier, wherein said composition is active for promoting skin wound healing without inducing osteogenesis when implanted at a site in need of skin wound healing
~~A composition for the treatment of skin wounds, said composition comprising a ribosome-depleted mixture of the bone morphogenetic proteins BMP-3 and TGF- β 2, said mixture of proteins having been treated to deplete ribosomal proteins, at least one said bone morphogenetic protein retaining native post translation modifications, said composition including a pharmaceutically acceptable carrier.~~

12. (Currently amended) The composition of claim 11, wherein said ribosome-depleted ~~mixture of proteins~~ bone protein mixture has been further treated to remove histone proteins.

13. (Currently amended) A composition for the treatment of skin wounds comprising:
a bone protein mixture depleted of histones and/or ribosomes,
the growth factors BMP-2, BMP-3, BMP-4, BMP-5, BMP-6, BMP-7, TGF- β 1, TGF- β 2, TGF- β 3, and FGF-1, each retaining native post-translation modifications; and
a pharmaceutically acceptable carrier, wherein said composition is active for promoting skin wound healing without inducing osteogenesis when implanted at a site in need of skin wound healing
~~A composition for the treatment of skin wounds, said composition comprising a bone derived mixture of proteins comprising the growth factors BMP 2, BMP 3, BMP 4, BMP 5, BMP 6, BMP 7, TGF β 1, TGF β 2, TGF β 3, and FGF 1 in a pharmaceutically acceptable carrier, said mixture having been treated to deplete histones and/or ribosomes, and said growth factors retaining native post translation modifications.~~

14. (Original) The composition of claim 13, wherein ribosomal proteins have been substantially eliminated from the mixture.

15. (Original) The composition of claim 13, wherein histone proteins have been substantially eliminated from the mixture.

16. (Previously presented) The composition of claim 13, wherein said proteins are at least partially phosphorylated and glycosylated.

17. (Previously presented) The composition of claim 13, further comprising at least one recombinantly produced protein chosen from the group consisting of BMP-2, BMP-3, BMP-4, BMP-5, BMP-6, BMP-7, TGF- β 1, TGF- β 2, TGF- β 3 and FGF-1.

18. (Previously presented) A method of promoting the healing of a skin wound, said method comprising applying to a skin wound a composition comprising a bone-derived mixture of proteins comprising BMP-2, BMP-3, BMP-4, BMP-5, BMP-6, BMP-7, TGF- β 1, TGF- β 2, TGF- β 3 and FGF-1 in a pharmaceutically acceptable carrier.

19. (Original) The method of claim 18, wherein the pharmaceutically acceptable carrier includes a hydrogel.

20. (Previously presented) The method of claim 18, wherein said proteins are at least partially phosphorylated and glycosylated.

21. (Original) The method of claim 18, where the pharmaceutically acceptable carrier includes a dressing selected from the group consisting of hydrocolloid dressings, hydrogels, foam dressings, and alginate dressings.

22. (Previously presented) The method of claim 18, wherein said composition further comprises one or more active ingredient selected from the group consisting of arginine, glutamine, zinc, copper, vitamin C, vitamin B1, vitamin B2, vitamin B3, vitamin B6, vitamin B 12, and folate.

23. (Previously presented) The method of claim 18, wherein said composition further comprises one or more growth factor selected from the group consisting of epidermal growth factor, platelet derived growth factor, insulin-like growth factor, keratinocyte growth factor, vascular endothelial growth factor, transforming growth factor alpha, nerve growth factor, connective tissue growth factor and granulocyte-monocyte colony stimulating factor.

24. (Previously presented) The composition of claim 11, further including one or more inflammation inhibitor selected from the group consisting of interleukin-1 inhibitor, interleukin-6 inhibitor and tumor necrosis factor-alpha inhibitor.

25. (Canceled)

26. (Currently amended) A method of improving angiogenesis in a wound area where osteogenesis is not desired comprising applying to said wound a composition comprising a bone-derived bone protein mixture of proteins which, wherein when said mixture is subjected to sodium dodecyl sulfate polyacrylamide gel electrophoresis, yields a reduced or non-reduced protein band pattern as identified in Figure 1, said composition including a pharmaceutically acceptable carrier.

27. (New) The composition of claim 11 comprising the growth factors BMP-2, BMP-3, BMP-4, BMP-5, BMP-6, BMP-7, TGF- β 1, TGF- β 2, TGF- β 3, and FGF-1.

28. (New) The method of claim 1 wherein said bone protein mixture is obtained from bovine bone, and, when subjected to trypsin digestion, comprises the following tryptic peptide fragments:

XLAAAGYDVEK

SLEKVCADLR

(V)VCGMLGFPSEAPV

STGVLLPLQNNELPG

STGVLLPLQNNELPGAHEYQY

STGVLLPLQ

(S)QTLQFXE

VYAF

HAGKYSREKNT(P)A(P)

SQTLQFDEQ

SLKPSNHA

A(H)I(Q)VERYV

XALF(G)AQLGXALGPI

SQTLQFDEQT

SQTLXF

VLATVTKPVGGDK

xVFAL

AVPQLQGYLR

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ALDAAAYCFR

GYNANFCAGACPYL

VNSQSLSPY

KAAPPSV(P).

29. (New) The method of claim 1 wherein said skin wound comprises a diabetic ulcer.